Before the

UNITED STATES COPYRIGHT OFFICE

Library of Congress
Washington, D.C.

In The Matter of	:	**Docket No. 2000-9**
Digital Performance Right	:	**CARP DTRA 1&2**
in Sound Recordings and	:	
Ephemeral Recordings	:	

Rebuttal Testimony of ADAM B. JAFFE

I. INTRODUCTION AND OVERVIEW

I have been asked to review the arguments put forward by RIAA and its witnesses in its direct case, and to respond to a number of issues that were raised by the Panel or in cross-examination during my own direct testimony. I have structured this rebuttal testimony as follows. I begin in Section II by restating the conceptual economic argument as to why the market value of performance rights for sound recordings is likely to be no greater than the market value of performance rights for musical works, and addressing certain issues relative to this analysis that arose during the direct case. I then proceed in Section III to analyze a large new dataset that I have obtained that shows exactly how much is paid

for musical work and sound recording rights when they are licensed at the same time, for the same use, in actual competitive markets.

In Section IV, I restate and update the fee model that I have introduced, and discuss certain sensitivity issues that arose during the direct case. After the discussion of my fee model, Section V examines the overall evidence in the proceeding on the relative magnitudes of promotional value and displacement from internet streaming of sound recordings. Section VI examines the evidence as to the reasonableness of the agreements put forward by RIAA as benchmarks. Section VII discusses the testimony of Dr. Nagle, and Section VIII considers the relevance of the information in the business projections produced by webcasters. Section IX addresses the economic consequences of the fee proposal put forward by RIAA. Section X concludes with consideration of a few issues related to the licensing of ephemeral copies.

The main conclusions of this rebuttal testimony are:

- Economic analysis of the incentives underlying the willing buyer/willing seller negotiation tells us that the value of the sound recording performance right is unlikely to be greater than that of the musical work performance right.

- Analysis of data relating to the use of previously existing sound recordings and musical works in movies and TV programs, based on over 700 songs and over $20 million in royalty payments, demonstrates conclusively that competitive markets value sound recordings no more highly than musical works.

- I restate my fee model to facilitate direct comparison to the RIAA fee proposal. Updated data do not change the conclusion that the over-the-air musical work fee per performance is $.00020. Conservatively adjusting this fee for the promotional value differential between sound recordings and musical works

produces a fee per performance for webcasters of $.00014. Multiplying this per-performance fee by 15 songs per hour for webcasting yields a webcaster fee per listener hour of $.0021.

- For simulcasts/rebroadcasts, the likely influence on willing buyer/willing seller negotiations of the zero royalty rate for the same programs over-the-air, combined with the lower likelihood of displacement, suggests a lower rate. I had previously concluded that the range of reasonable rates was from 40% to 70% of the over-the-air musical works rate. I propose that the Panel use the lower end of this range (40% of over-the-air) for simulcasts/rebroadcasts, producing a per-performance fee of $.00008. Multiplying by the average of 12 songs per hour on over-the-air music station yields a fee per listener hour of $.0010.

- Examination of licenses for performance of musical works on the internet confirms the validity of my reliance on over-the-air performance royalties. Although less information is available, what information there is indicates that musical work rates on the internet may be slightly higher than, or much lower than, musical work rates for over-the-air radio.

- There is good evidence of significant promotional value for sound recordings on over-the-air radio, and this value is greater for sound recordings than for musical works. The available data indicate that promotional value also exists on the internet, and is larger than the effect of displacement of CD sales by internet performances. RIAA's evidence on displacement consists entirely of fears about the future and unsystematic, unquantifiable anecdotes.

- The evidence indicates that the 26 agreements put forward as benchmarks by RIAA do not reflect willing buyer/willing seller valuations, but rather the market power of RIAA in the presence of incomplete information, licensees' concerns about time pressure and uncertainty, bundling of the statutory rights with other valuable considerations, and willingness to pay above-reasonable rates to avoid large legal fees associated with securing uncertain rates through the CARP.

- Most of the 26 licenses are of trivial economic significance, and these licensees are not comparable to those seeking the statutory license in this proceeding.

- Even putting aside issues of reasonableness and comparability, the RIAA benchmarks do not support their fee proposal. The proffered benchmarks show no significant economic activity corresponding to 15% of revenue. The vast majority of royalties collected on a per-performance basis are based on a royalty rate one-eighth as great as that proposed by RIAA in this proceeding.

- The superficial flexibility offered by the RIAA fee model is illusory. Their per-performance model is 20 to 100 times as expensive as their percent-of-revenue model.

- A recent report by the Copyright Office confirms the validity of my analysis of the relationship between fees for ephemeral copies and fees for performances.

II. EQUIVALENCE OF MUSICAL WORK AND SOUND RECORDING DIGITAL PERFORMANCE RIGHT MARKET VALUES

A. Implications of the willing buyer/willing seller test

To understand whether the willing buyer/willing seller outcome for sound recordings would be the same as that for musical works, we must analyze how both buyers and sellers would approach a negotiation over blanket licenses for non-subscription digital performance rights. In both cases, we can analyze how the "willing buyer" (potential licensee) and the "willing seller" (potential licensor) would approach these negotiations. If both the buyers and the sellers would be approaching these negotiations from economic positions that are similar with respect to musical works and sound recordings, then there is no economic basis for concluding that the market values for the two rights would differ.

1. The buyer side of the negotiation

The value that buyers put on the right of public performance of both musical works and sound recordings is derived from the value that they expect to realize by making public performances of music. In order for the buyers' valuations of the two rights to differ, it would have to be the case that there is some distinction in the manner or extent to which each right facilitates such performances. But no such differences exist. Buyers need both the sound recording and the musical work performance rights in order to make public performances. This means that each right is worthless to the buyers unless they also procure the other right. Conversely, once both sets of rights are procured, they each contribute symmetrically to the generation of the value through public performance. Because of this symmetry and mutual necessity, the buyers' "willingness to pay" for each right will be derived in the same way from the value that the buyers expect to derive from making performances. Hence, there is no difference in the buyers' "willingness to pay" for the musical work performance right and the sound recording performance right. Going into negotiations over either right, the buyers will be in the same position.

Note that it is important for this analysis that we are analyzing, in each case, blanket licenses for substantial portions of the repertoire.[1]

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[1] As discussed in my direct testimony, the appropriate economic interpretation of the willing buyer/willing seller test is that of a hypothetical competitive market. We can think of this market as being one in which competing non-exclusive licensors each

For some *specific* sound recording or musical work the user may value one more than the other. If licensing were done on a performance-by-performance basis, and I want to broadcast Frank Sinatra singing "As Time Goes By," it could be that what I really want is a Sinatra performance, or it could be that what I really want is that particular song. Depending on my preference, if the owner of Hoagie Carmichael's copyrights refused to give me the musical work performance right, I may well decide to play some other Sinatra sound recording. On the other hand, if the owner of the sound recording right refused, I might use some other recording of the song. So for this particular sound recording/musical work combination, I might value the musical work more, or I might value the sound recording more.

At the *blanket-license* level, however, I do not have the choice to substitute a different sound recording or a different musical work. Whatever I broadcast, it must contain both a musical work and a sound recording.[2] As long as I am negotiating for blanket rights to each, they are both essential and I would value them equally.

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offer essentially the entire repertoire, or, alternatively, one in which competing licensors each offer blanket licenses for substantial portions of the repertoire.

[2] This statement is not strictly true, because there are some musical works and some sound recordings for which permission is not needed. On the musical work side, I could try to find Sinatra singing a song that has fallen into the public domain. Conversely, Sinatra's pre-1972 sound recordings do not carry the right to control public performances. But as long as many of the performances that I wish to make require both rights, I will need a blanket license covering both musical works and sound recordings.

2. The seller side of the negotiation

The sellers of each right are not the same, but each comes to the hypothetical table from a similar position. In each case, the costs of producing the underlying intellectual property are sunk. Further, in each case, these costs (including compensation for the risks incurred) are covered by revenues earned in other markets. In the case of sound recording rights holders, these costs are covered by CD sales.[3] In the case of musical work rights holders, the costs are covered by the combination of mechanical royalties and over-the-air performance royalties. The digital performance royalty is incremental to this substantial revenue base in both cases. Finally, and most important, there is no incremental cost imposed on either the musical work or sound recording licensor by virtue of making the underlying intellectual property available for digital performance.[4],[5] In such a situation,

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[3] Altschul, Transcript at 872-873; Katz, Transcript at 1051.

[4] There is evidence, discussed further below, that allowing digital performances actually *increases* the licensor's revenue in other markets, via promotional value. This would imply that the incremental cost is actually negative, and the licensor's minimally acceptable outcome would be a negative royalty, i.e., a payment from the licensor to the licensee. Alternatively, if it were believed that digital performances displace sales of CDs, this could be thought of as an incremental cost of the digital performance license, which would result in a minimum acceptable royalty greater than zero. As explained further below, the possibilities of promotion and displacement may lead to adjustments that have to be made to the otherwise equivalent values of sound recordings and musical works. Thus the argument in this section should be understood as establishing equivalence in the value of musical works and sound recordings before any consideration is given to either promotion or displacement.

[5] Altschul discussed Warner Bros. Record's expenses at length in both his written and his oral direct testimony. None of the costs he mentions, however, pertain to webcasting. (Altschul, Transcript at 805-821, and Direct Written Testimony of David Altschul at 14-21) Additionally, Katz and Himelfarb were both unable to identify

economics tells us that both the sound recording and musical work rights holders would approach this hypothetical negotiation for the performance right in the same way: they would recognize that there is no incremental cost to supply this market, and would simply hold out for as much of the user's overall performance value as they can get.[6]

Note that this analysis does not in any way suggest that the zero-incremental-cost of the right being transferred would lead to a zero royalty. Quite the contrary, intellectual property with zero incremental cost is routinely licensed at positive royalty rates. With respect to both musical works and sound recordings, we have a buyer (potential licensee) with some maximum willingness to pay which is derived from the value to the buyer of the performances, and we have a seller with a minimum willingness to accept equal to the zero incremental cost. The economics of bargaining, as well as common sense, suggests that the parties will reach agreement at some point in between. Economics cannot really tell us *where* in the interval between the buyer's maximum royalty and the seller's minimum royalty the parties will come out. It will depend on the stubbornness, negotiating skills, and perhaps bladder

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additional costs specifically associated with webcasting under the statutory license. (Katz, Transcript at 1045-1046; Himelfarb, Transcript at 2868)

[6] It is possible that at some future date it will cease to be the case that the cost of making sound recordings is covered by CD sales, and that digital performance royalties are no longer incremental. But there is no evidence in this proceeding that anyone anticipates such a dramatic transformation of the marketplace during the time period at issue here. (Katz, Transcript at 1034-1035, 1104) Griffin actually states that there is a possibility of an increase in sales in the short run for less well known artists. (Griffin, Transcript at 1588-1589)

control of the parties. These factors combine with the going-in valuations of the parties to determine the outcome. And because these going-in valuations on both the buyer's and seller's sides are the same with respect to musical works and sound recordings, there is no reason to expect that the outcomes would be higher for one or the other.

Because the minimum acceptable royalty for the licensors of both the musical work and the sound recording is zero, and the likely result of bargaining is an agreement somewhere between this zero valuation and the buyer's valuation driven by the value of performances, the outcome of the hypothetical negotiation depends, in effect, only on (1) the value to the buyer of the right to perform publicly, and (2) the fraction of that value that ends up, through negotiation, passing to the musical work and sound recording licensors. Again, unless there is some systematic difference between the negotiation skills of the respective licensors, there is no reason to believe that one or the other of these will constitute a larger share of the overall performance right.

The notion that parties that jointly create value will split that value equally is also confirmed by the very statute under which this proceeding occurs. The joint interest of the record label and the recording artist in the sound recording itself is analogous to the joint contribution of the sound recording and the musical work to a public performance. Further, there is no evidence that the magnitude of their original contributions to the underlying CD are the same. Yet Congress deemed that the labels

and artists should split the sound recording digital performance royalty equally, i.e., that the value of the artist's contribution should be deemed equal to the value of the record label's contribution, just as I have suggested that the value of the sound recording and the musical work are similar.

B. Other issues pertaining to the relationship between sound recording and musical work valuations

1. Dr. Nagle's approach to valuation confirms the equivalence of sound recording and musical work

The view that the value of the sound recording performance right is driven *entirely* by the value to the buyer of making performances provides the foundation for the analysis undertaken by Dr. Nagle. As explained further below, I believe that Dr. Nagle's analysis is not informative as to the value of the sound recording performance right under the willing buyer/willing seller test. But I find it interesting, nonetheless, that in attempting to determine the value of the sound recording performance right, Dr. Nagle adopted a framework that is predicated on the assumption that the licensor of sound recording performance rights would approach this licensing on the basis of zero incremental cost, so that the value of the right is driven entirely by the valuation of the potential licensee.[7] That is, Dr. Nagle's analysis made no reference to, and drew no inferences from, the costs or risks incurred by

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[7] See Nagle, Transcript at 2561.

the record labels in creating sound recordings. He looked *only* at what the right of public performance might be worth to the licensees.

There is nothing about this analysis that would be in any way different if the question were the value of the musical work performance right.[8] Thus, if Dr. Nagle's analysis is at all relevant to the question of valuing the sound recording performing right, it follows as a matter of simple logic that (1) the costs and risks incurred by the producers of sound recordings are irrelevant to the valuation (since they did not enter in any way into Dr. Nagle's analysis), and (2) the market valuations of sound recordings and musical works are likely to be similar (since Dr. Nagle's analysis would apply just as well to musical works as it does to sound recordings).

2. The irrelevance of the "relevant market" test

Professor Wildman's observation that sound recordings and musical works compete in different markets is true, but does not undercut this analysis.[9] Indeed, in the sense used by Wildman (markets defined for the purpose of antitrust analysis), there are *four* distinct markets that have been discussed in relation to the value of sound recordings and musical works. These are: (1) the market for sound

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[8] Nagle, Transcript at 2659-2661. As explained above, the available alternatives for the two licenses are no different – both licenses are necessary.

[9] Direct Written Testimony of Steven S. Wildman at 10-11; Wildman, Transcript at 3336-3337. Although Wildman states that musical works and sound recordings "trade in different markets," he recognizes that "You can't produce a sound recording by taking more work and less performance or less recording or vice versa. They both have to be there."

recordings embodied in CDs; (2) the market for the musical work mechanical rights necessary to reproduce and sell the CDs; (3) the market for the right of public performance of sound recordings by digital means; and (4) the right of public performance of musical works by digital means. It is certainly true that (3) and (4) are distinct markets, in the sense that the right of public performance of the sound recording is not a substitute for the right of public performance of the musical work, or vice versa. Indeed, as I have emphasized, you need both. At the same time, (1) and (3) are also not the same market. Having the CD, or even the right to copy the CD, is not a substitute for the right of public performance, or vice versa. They are distinct markets, and must be analyzed as such.

Similarly, my conclusion above that the sellers of musical works and sound recordings come to the hypothetical negotiations with the same economic position does not depend on their being in the same market. They are not, but I have analyzed the conditions underlying each of these two distinct markets and shown that these conditions are the same.

3. Relative valuation of sound recordings and musical works in other countries

In my direct testimony, I noted that the value of sound recording performing rights, in those countries that recognize such rights, is generally no greater than the value of musical work performing rights in

those same countries. The Rebuttal Testimony of Professor William Fisher further analyzes the treatment of sound recording and musical work performing rights in other countries, in order to determine whether the relationship between the valuations of the sound recordings and musical works might be due to different legal regimes governing the valuation of the two different rights. His analysis confirms the general conclusion that, in those countries where the legal regimes covering the two rights are equivalent, sound recording performances are generally valued at or below the level of the musical work performances.

4. Artist versus composer

There has been some discussion in this proceeding of how potential listeners typically search for the music they want to hear and how the services identify the music the user is listening to.[10] While it appears that search engines typically do not provide the ability to search for particular composers (and the composer is typically not identified along with the rest of the information provided to the user while listening), this does not in any way imply that listeners do not value the musical work.[11] The typical service *does* identify and allow one to search for a particular *song* by name.[12] The song embodies the musical work,

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[10] McIntyre, Transcript at 5032-5034; Roy, Transcript at 7297-7298; Moore, Transcript at 7488; Juris, Transcript at 7098-7099.

[11] The rebuttal testimony of Michael Fine supports the conclusion that music consumers value musical works at least as much as they value the artists who perform them.

[12] Wise, Transcript at 4182-4183; Pakman, Transcript at 4376; Juris, Transcript at 7098-7099.

and is in fact what is covered by the musical work copyright. The fact that people do not typically search by composer is no more relevant than the fact that they do not typically search by record label. The song is the musical work, just as the artist represents the sound recording. Hence the prevalence of both the ability to search by song title, and the ability to search by artist name, in fact reflects the underlying symmetry of contribution of the sound recording and the musical work.

C. What can we learn about the relative value of sound recordings and musical works from the markets for CDs and mechanical royalties?

RIAA argues that making CDs is a costly and risky business, and that their costs and risks are greater than those incurred by composers and publishers.[13] As explained above, this proposition, even if true, is irrelevant to the hypothetical negotiation in a different market over the digital performance rights, because: the costs and risks in that different market are all sunk; they are incurred with the expectation of being recovered in the CD market; and, in any event, there is no incremental cost to the sound recording rights holders associated with making the sound recordings available for digital performance.[14] For this reason, even if it were true that it costs more or is riskier to make sound

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[13] Direct Written Testimony of Charles Ciongoli at 2; Ciongoli, Transcript at 1150-1156; Katz, Transcript at 998-1001; Direct Written Testimony of Steven S. Wildman at 12-13; Wildman, Transcript at 3363-3368.

[14] Altschul, Transcript at 805-821, and Direct Written Testimony of David Altschul at 14-21; Katz, Transcript at 1046; Himelfarb, Transcript at 2868.

recordings than to make musical works, it would not change the proposition, recognized by Nagle, that these costs and risks do not affect the market price for the digital sound recording performance right.[15]

But even if the costs and risks in the CD market were somehow relevant, the evidence in this proceeding does not support the proposition that the costs and risks are greater on the sound recording side.

As for risk, the conceptually appropriate question is not whether any given album is a risky proposition, but rather whether the overall business of making albums is risky. Record companies have a portfolio of artists and albums, and their cash flow and profits depend on the sales from that portfolio. The fact that most albums do not make money is no more informative than the fact that most songs written by composers do not make significant money. RIAA has presented no evidence that the profits of recording labels are any more volatile or uncertain than those of music publishers.[16]

With respect to the magnitude of the investments made, RIAA has not made a case that the investment in creating sound recordings

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[15] Nagle, Transcript at 2672-2673.

[16] [[

REDACTED

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exceeds the investment in creating musical works. The main input into the creation of musical works is the composers' time, which is very difficult to value for a given composer, and even more difficult to aggregate across the body of composers. The particular cost figures put forward by RIAA may seem substantial, but they do not establish an investment greater than that necessary to create musical works.[17]

There has also been evidence in the proceeding regarding the average profits earned by a record company on the sale of CDs, relative to the mechanical royalties earned by composers and publishers on CDs.[18] This comparison is somewhat difficult to interpret, because the mechanical royalty is limited by statute. But even in the absence of this statutory constraint, the larger compensation for record companies relative to composers and publishers from the sale of CDs does not demonstrate that their costs are greater, or that the value of the sound recording exceeds that of the musical work.

As discussed in my direct testimony, composers and publishers earn substantial royalties – approximately $340 million per year – from

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[17] RIAA purports to establish that record labels' investments exceed those of music publishers. (Direct Written Testimony of Charles Ciongoli at 2; Ciongoli, Transcript at 1150-1156; Katz, Transcript at 998-1001; Wildman, Transcript at 3363-3368; Direct Written Testimony of Steven S. Wildman at 12-13) But publishers represent only part of the investment that creates musical works. There is no evidence in the proceeding regarding the value of composers' contributions to the creation of musical works, and the royalty-sharing rules between composers and publishers do not demonstrate their relative contributions any more than the 50/50 split of royalties decreed by Congress between record labels and artists represents their relative value contributions to the creation of sound recordings.

[18] Katz, Transcript at 1059.

over-the-air performances.[19] The royalties from over-the-air blanket licenses are distributed to individual composers and publishers in proportion to the frequency with which their musical works are, in fact, played on the radio. And a song is not played on the radio to any significant extent until it appears on a CD. This means that when a composer agrees to have her song on a CD, she generates the possibility of a significant future royalty stream. Conversely, a publisher who holds out for a high mechanical royalty on a particular CD risks not being on the CD, and hence losing a significant future revenue stream.[20] In effect, because incorporation into the CD is a necessary condition for access to the large pool of over-the-air royalties, owners of musical work mechanical rights are likely to agree to transfer those rights at rates well below their underlying value. For this reason, the overall average relationship between record company profits and mechanical royalties cannot be used to infer the relative magnitude of investment in each, or the relative value of musical works and sound recordings.

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[19] Direct Written Testimony of Adam Jaffe at 45-46.

[20] Katz, Transcript at 1005: "A music publisher's main source of income derives from a recording by an artist. Once that recording is done, they can get income from different streams and performance or reproduction. But if you are a music publisher, you have got to get your song recorded, otherwise it doesn't actually have much worth."

III. MARKET EVIDENCE ON THE RELATIVE VALUE OF MUSICAL WORK AND SOUND RECORDING RIGHTS

The previous section summarized the strong conceptual argument why the competitive market value of sound recordings should be comparable to that of musical works in incremental licensing markets. In this section I show that this prediction is overwhelmingly verified by empirical data on the competitive market prices at which license rights covering sound recordings and musical works are purchased.

A. The competitive market for the rights to reproduce sound recordings and musical works in movies and television

The U.S. does not generally recognize a right of public performance in sound recordings, so it is not possible to make a direct comparison of musical work and sound recording performance royalties in a competitive market. There are, however, circumstances in which the market does value rights related to sound recordings and musical works, where the right at issue is not a performance right, but *is* an incremental right in the sense discussed above. In particular, when a pre-existing sound recording is incorporated into a motion picture or television program, the producer must secure the right to reproduce both the sound recording itself and the underlying musical work for this purpose.

The economic incentives underlying the determination of these royalties correspond to those described above, namely that the buyer needs both the musical work and sound recording rights, and the

licensors of both the sound recording and musical work rights face zero incremental cost in conveying the right in question. Further, the markets in which these rights are purchased are competitive, because payments for each song are negotiated separately, and producers have access to multiple sound recordings and multiple musical works. Therefore, these markets provide a strong empirical test of my conclusion that the valuation of sound recording and musical work performance rights should be similar.

The right that is necessary in order to use an existing sound recording in a motion picture or television episode is generally called a "master use right," while in the case of the musical work, this right is referred to as the synchronization, or "synch" right (because the audio musical work is "synchronized" with the video). Economic analysis of the incentives underlying the bargaining for the acquisition of these rights is exactly the same as the analysis above regarding performance rights, except that the negotiation occurs on a song-by-song basis rather than a blanket basis. The movie producer will have some maximum willingness to pay to use the song; she needs permission from both the sound recording copyright holder and the musical work copyright holder. Each of the two copyright owners, meanwhile, faces no incremental cost in

allowing the sound recording or musical work to be incorporated into the movie.[21]

In the case of any specific song, the producer may care about getting a particular performer, or may care about getting a particular song, so that for any single song the payment for the sound recording may be greater than that for the musical work, or vice versa. On average, however, if my analysis of the underlying economics applies, the two should be approximately equal.[22]

There are not, to my knowledge, any public data sources that report fees paid by movie and television producers for master use and synch rights. I have been able to obtain, from three of the five largest major Hollywood studios, data on the fees paid for these rights in a substantial number of recent productions of these studios. These data

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[21] When the movie is shown in theaters, a public performance also occurs. There is no right to control the public performance of the sound recording. With respect to the musical work, there is a right to control public performance, but the ASCAP and BMI consent decrees (following antitrust litigation in the 1940s) prohibit the performing rights organizations from charging a separate fee for the right to perform the musical work in United States movie theaters. Consequently, a synch license for a theatrical movie typically also conveys a right to perform the song in U.S. movie theaters. From an economic perspective, the synch right and the master use right are equivalent in terms of the economic activity they allow to occur: they are both necessary and sufficient in order to make the movie and show the movie in theaters.

[22] With respect to both the synch right and the master use right, there are issues of values derived from other markets that could conceivably affect the royalties. In the case of the sound recording, incorporation in a hit movie could stimulate CD sales. In the case of the musical work, successful movies may eventually be shown on television, which would generate additional performance royalties. In both cases, these additional revenues would be highly uncertain, because few movies are successful enough to generate significant impacts of this sort, and in terms of the comparisons above these two effects offset each other. On balance, there is no reason to believe that these potential effects would have a major impact on the conclusion that the sound recording and musical work rights have similar values.

were derived from the accounting records of the companies. In order to ensure that reported fees represent competitive market conditions, I have excluded transactions that were not "arm's length," where other services or rights were bundled with those of interest, or where the sound recording and musical works right were owned by the same party, and songs that were written or rerecorded for the production in question.[23]

Figure 1 displays the results for motion pictures from the three studios. For competitive/confidentiality reasons and concerns of the studios, the three studios are referred to as Studio A, Studio B, and Studio C. After the exclusions described above, I have data for 423 songs in 30 different movies, representing licenses issued by [[REDACTED]] of publishers and [[REDACTED]] of record labels, and comprising total payments for these rights of about [[REDACTED]] million. As expected, for any given song, or even for any given movie, there is some variation, with the royalties for the sound recording right sometimes being greater and the royalty for the musical work right sometimes being greater. For example, the "master" of Stevie Ray Vaughn's performance of Texas Flood was licensed at [[REDACTED]], while the synch right was licensed for [[REDACTED]]. On the other hand, the publisher of the song Anticipation received a synch license fee of [[REDACTED]], while the master recording (by Gefkens)

[23] Inclusion of these transactions in the analysis would not change the conclusion that the sound recording is valued, on average, at slightly less than the musical work.

was licensed at [_ REDACTED . The data nonetheless reflect that the synch and master use fees, in the vast majority of instances, are *identical.*

Interestingly, in some cases the holder of the musical work copyright agrees to a fee, but insists on a "most favored nation" ("MFN") provision that ensures that, if the studio agrees to pay more for the corresponding master use right, the synch right payment will be increased to make them equal. Conversely, sometimes the sound recording copyright owner insists on MFN treatment vis-à-vis the corresponding synch right. Such insistence on parity, in both directions, obviously suggests that copyright holders believe that the two rights should be valued equally.

Indeed, equality is what the data show. On average, the payments for the sound recording are slightly less than those for the musical work, with the sound recording payments equal to [[REDACTED]] of the musical work payments for Studio A, [[REDACTED]] for Studio B, and [[REDACTED]] for Studio C. But the overall tendency towards approximate equality is unmistakable.[24]

Figure 2 displays the data for television. I have data for 7 television series/films produced by Studio A and Studio B during a recent production season.[25] The episodes in these series contained 288

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[24] Although the phenomenon of MFN clauses in one direction or the other is not uncommon, it is not necessary to the result. The same finding of approximate equality holds if the songs with MFN clauses in either direction are excluded.

[25] The situation with respect to performance rights for television shows is slightly different than for movies. Again, the sound recording does not carry a right to

songs (after excluding those with possibly non-competitive market rates, as explained above) for which a little over [[REDACTED]] in royalties was paid. Again, the conclusion is crystal clear: the sound recording is worth, if anything, slightly less than the musical work.

These data confirm the validity of my conceptual analysis of the economic incentives underlying bargaining for sound recording and musical work rights licensing with a lack of ambiguity that is rare in economics. There is simply no room for debate. Whatever one may believe about the relative cost or profitability of making CDs or writing songs, when the sound recordings embodied in those CDs are licensed for later use, the evidence is overwhelming that the value of the sound recording right is no greater than the value of the musical work right.

B. Summary of discussion of fundamental symmetry of sound recording and musical work performance right valuations

If the concept of value to be applied is the willing buyer/willing seller test, the evidence is overwhelming that the overall value (i.e., before any consideration of the impact of either promotional value or

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control public performances, while the musical work does. In this case, the performing rights collectives do collect the royalties for public performances, in a manner analogous to the royalties for over-the-air radio performances that I have discussed previously. The fact that the incorporation of a song into a TV show creates an opportunity for a musical work performance royalty, but no opportunity for a sound recording performance royalty, might lead one to expect that the competitive price for the "synch" right would be reduced. There is, however, no evidence of such a tendency in these data. The performance royalties for musical works depend on the number of performances, Since these musical works are single songs used in a single episode of a TV program, the number of performances may not be large. Of course, the possibility of such additional payments for the musical work (but not the sound recording) only strengthens the conclusion that the overall value of the sound recording is no greater than that of the musical work.

displacement of CD sales) of digital sound recording performance rights is no greater than the value of musical work performance rights:

- Economic analysis of the willing buyer/willing seller negotiation tells us:

  (1) that the licensor's costs would be irrelevant, and that the outcome would be a royalty equal to some fraction of the buyer's valuation;

  (2) that the buyer's valuations of the sound recording and musical work performance rights would be identical;

  (3) that there is no economic or legal reason why the *fraction* of that value conveyed in the royalty to the licensor would differ as between sound recordings and musical works; and, therefore

  (4) the outcomes of the two negotiations are likely to be similar.

- Dr. Nagle's analysis of the value of the sound recording performance right is predicated on the principles listed in the previous bullet, and hence confirms the equivalence of the sound recording and musical work performance right values.

- No arbitration panel or similar body that has explicitly examined the question of the relative value of sound recording and musical work performance rights has ever concluded that the sound recording should be valued at a greater rate. In contrast, the digital-cable CARP in the U.S. and the Copyright Board in Canada explicitly considered this question and determined that the values should be the same.[26]

- There is no evidence in this proceeding of any market in which sound recording and musical work rights are valued in a situation incremental to their original creation, in which the sound recording is valued more highly than the musical work, let alone valued at a rate some 5 to 20 times that of the musical work.

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[26] See Jaffe Rebuttal Exhibit 4, Report of the Copyright Arbitration Royalty Panel, Docket No. 96-5 CARP DSTRA, at ¶ 169 (November 28, 1997); Jaffe Rebuttal Exhibit 5, Decision of the Copyright Board of Canada, Public Performance of Sound Recordings 1998-2002, August 13, 1999, at 32. In other countries, the relevant authorities *implicitly* came to the same conclusion (or the stronger conclusion that the sound recording is worth *less* than the musical work) by assigning equal or lower values to the sound recording than were assigned to the musical work.

- Data from hundreds of songs, in dozens of movies and television programs, representing licenses issued by hundreds of publishers and record companies and involving tens of millions of dollars of royalties, prove conclusively that competitive markets value rights derived from sound recordings no more highly than the analogous rights derived from musical works.

IV. THE FEE MODEL

A. Structure of the fee model

In my direct testimony, I explained that the best way to develop the reasonable royalty fee is on the basis of the extent to which performances are actually made. I used one hour of broadcast heard by one person (a "listener hour") as a basic unit of the extent of performances made. I also derived a model based on one person hearing a single song (a "listener song") that I suggested should be available as an alternative for those streamers whose programming contained significant amounts of time with no sound recordings for which performance royalties are owed.

In its fee proposal, RIAA has proposed that one fee option be based on the number of "performances," defined to be equivalent to the concept that I had labeled the "listener song." In order to avoid confusion, and to focus the debate on the issues on which we differ rather than on potentially distracting issues of nomenclature, in this report I will accept the RIAA designation of the "performance" as the basic fee unit, and recast my fee model based on that concept of performance. This restatement of my approach is conceptually equivalent to the analysis that I had previously performed, but will, I believe, assist the Panel in

understanding the similarities and differences between my approach and that of RIAA.

In my previous analysis, I calculated the average fee paid by over-the-air broadcasters per listener hour, and used that listener-hour fee as the basis for a proposed fee for internet streamers. I also calculated the average fee paid by over-the-air broadcasters per listener song, and suggested that this be an alternative model available to some streamers. To emphasize the point at which my approach can be looked at in parallel with that of RIAA, I can reverse this order of derivation, starting first with the fee per performance (listener song) on over-the-air radio, and then constructing the fee per listener hour from the per-performance fee.

As explained in my direct testimony, there is considerable benefit in terms of calculational ease to using data on Aggregate Tuning Hours ("ATH"). The number of annual ATH can be readily calculated going forward for most streamers. This number corresponds to annual listener hours, which is why I had based my previous model on that concept. Although I now propose to derive the basic fee benchmark on a per-performance basis, the availability of ATH information makes it highly desirable to formulate the performance-based model so that it can be calculated on the basis of ATH. This greatly reduces the data-collection burden, with the added benefit that the royalty is based on widely used numbers that are collected for other purposes.

To derive fees based on ATH from the fee per performance, I propose allowing streamers who choose to do so to base their royalty payments on ATH, combined with an estimate of the average number of songs per hour that corresponds to their category of streaming activity. For broadcast streamers with music formats, the ATH fee would be the fee per performance, times 12 songs per hour, the approximate average for music stations in my over-the-air database.[27] For webcasters, the ATH fee would be the per-performance fee times 15 songs per hour, which appears to be a typical number for webcasting.[28] Stations who choose not to utilize these typical or average songs-per-hour figures (e.g., news/talk/sport stations, mixed-format stations, or religious talk stations with limited music) would base their license payments on some reasonably reliable method for estimating the actual number of songs per hour in their streaming.

In my direct testimony, I suggested that the option of paying based on performances (listener song) rather than on the basis of listener hours be limited to those streamers with fewer than 7 songs per hour. This was to prevent creating incentives for streamers with between 7 and 12 songs per hour choosing the listener-song model, and thereby undermining the validity of the average. The experience of attempting to

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[27] This is a conservative assumption. The sample of stations in the fee model averaged slightly greater than 11 song detects per hour.

[28] Wise, Transcript at 4240.

estimate actual songs per hour for some stations, combined with the proposal by RIAA of a per-performance fee, has convinced me that such a limitation is unnecessary. I believe that the cost and difficulty of constructing an actual estimate makes it unlikely that any station in the 7-12 songs-per-hour range would bother to try to estimate its actual songs per hour.[29]

In essence, what I have done is to reproduce the previous model, but to derive the fee per hour from the fee per song, rather than vice versa. I believe that this simplifies the model, and makes it more directly comparable to the RIAA proposal. Substantively, the results are approximately the same as before for any licensee that chooses to count the actual number of performances and for broadcast music channels using the ATH model (because multiplying the per-performance fee by 12 songs per hour approximately reproduces the previous listener-hour result). For webcasters on the ATH model, the new approach leads to slightly higher fees than before. This is because the previous approach assumed that a webcast *hour* was equivalent to an over-the-air music *hour*, even though the webcast hour typically contains more songs. The new approach would recognize that, at the present time, the evidence

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[29] My direct testimony also proposed a third option, the "segmented listener hour" model. On reflection, I have concluded that this is an unnecessary complication, because stations such as Comedy Central Radio that have programming portions free of sound recordings for which performance rights must be obtained can calculate the appropriate fee using the per-performance (listener-song) model, incorporating the extent of programming without feeable performances into their reasonable estimate of songs per hour.

indicates that the average number of songs per hour in webcasting exceeds the average in over-the-air broadcasting, and would increase the webcasting fee proportionately.[30]

B. Recalculation of the fee model

At the time of my direct testimony, the most current data available to me on over-the-air broadcasters musical work royalty payments came from payments made by the broadcasters for the year 2000 on an estimated basis. As I explained then, there was no reason to believe that the final numbers would differ systematically from the payments based on estimates. Since the filing of my first report, the final reports for 2000 for ASCAP and BMI, and final numbers for SESAC for most stations, have become available. I have recalculated the fees incorporating this final information, to check my initial assumption that the estimated payments would be accurate on average. I also utilized some additional information that became available to refine my estimates of the number of songs per hour in various formats.[31] The results of the revised calculations are summarized in Figure 3.

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[30] There is nothing intrinsic to webcasting that makes the number of songs per hour necessarily greater. If this same model were to be utilized for some future time period, it would be appropriate to adjust the webcasting songs-per-hour figure to reflect actual practice at that time.

[31] I updated the Broadcast Data Systems (BDS) songs-per-hour calculation based on data provided by Mr. Fine as part of discovery in this proceeding. In the average detects-per-hour data from the spring, each unique station in the dataset was treated as being tracked by the BDS for the entire year. However, some stations were not tracked by BDS for the entire year. I recalculated average detects per hour based on the actual number of weeks each station was tracked by BDS. In addition, I excluded Mexican and Canadian stations. These adjustments had a small effect on

I requested from the radio station groups updated data that reflected the fees owed by station based on 2000 year-end revenues.[32] As expected, for some stations, fees increased as compared to the fees reported to me in the spring, and for some stations, fees decreased. But in aggregate, the year-end fees paid to ASCAP, BMI, and SESAC were very close to the figures that were reported to me in the spring. In addition to updating the payments made by stations in my calculation, I have also included additional stations for which I now have complete data. If I did not have complete performing rights organization fee data as part of the most recent data production, I used the best available information on the stations' fees, that is, the data on fees that they reported to me in the spring of 2001.[33]

In total, I relied on data from 872 radio stations representing over $143 million in fees paid to ASCAP, BMI, and SESAC.[34] The fee per

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the figures that I utilized for songs per hour for different formats, slightly increasing the average songs per hour.

[32] The timing of my last report made it impossible for me to use data based on year-end revenue. Radio stations make payments throughout the year to ASCAP and BMI based on revenues earned in the prior year plus an inflation adjustment. In April of the following year, stations file an "annual report," summarizing year-end revenues, and calculate a fee based on that revenue. Stations compare this fee with payments made, and "true up" their accounts. If the estimated payments were greater than the fee owed, the station gets a refund. If the estimated payments were less than the fee owed, the stations make an additional payment. These "true-up" payments were not reflected in the data I used in the spring.

[33] For 62 stations representing less than $4 million that were included in the 898 stations used in my calculations in the spring, I was missing final data on payments to one of the performing rights organizations, usually SESAC.

[34] As discussed in my direct testimony, stations were excluded from the per-performance calculation if I did not have data on the average number of songs per hour for stations of that format.

performance and the fee per listener hour for over-the-air radio stations are $.00020 and $.0022, respectively, as summarized in Figure 3. These numbers represent the average fee per listener paid by stations that represent a significant portion of the total fees paid to the performance rights organizations for the copyright obligation incurred for performances of the musical work on over-the-air radio.

C. Minimum fee

Within a per-performance model, payments to copyright holders are proportional to the performances of music, and this fee structure guarantees the copyright owner is compensated for music used. As discussed in my direct testimony, this eliminates the concern, expressed in the legislative history and echoed by Mr. Marks in his direct testimony, [[

REDACTED

]]*[35] Under our model, they will be paid for every performance made. The only circumstance in which the resulting royalties will be small is where there are very few performances. I have not seen any argument as to why, when very few performances are being made, it is necessary that significant royalties be paid. Indeed, based on this

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[35] Marks, Transcript at 9389-9390

* Subsequent to the filing of the restricted version of Professor Jaffe's rebuttal testimony, RIAA requested that additional information herein be designated as "Restricted" under the Protective Order entered in this proceeding. The relevant information has been bracketed and marked with an asterisk in this document. In accordance with the Protective Order, the Services reserve the right to challenge RIAA's claimed "Restricted" designations.

concern alone, it would be appropriate to have no minimum fee, so that a licensee who made no performances would not have to pay any royalties.

Given that the per-performance model protects the copyright owners from the rights' being used without appropriate compensation being paid, the only remaining economic argument for a minimum fee is that one is necessary to protect the administrator of the fee collection system from having to service a licensee who costs more to have in the system than the revenue that it generates. In this context, what is relevant is not the overall cost of operating the licensing system, but rather the *incremental* cost of adding another licensee to that system. The revenues that are collected by the per-performance model will cover the overall costs of operating the licensing system. The per-performance model is, after all, derived from the over-the-air musical works licenses, which are administered by ASCAP, BMI, and SESAC. Those entities provide a marketplace benchmark for what it costs to run such a system. Each of them must process payments, keep track of data, make distributions – perform all of the functions that Mr. Marks testified SoundExchange will have to perform.[36] These costs are covered by the payments that are made by licensees who make significant performances, and indeed each licensee will bear those costs in proportion to the number of performances made.

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[36] Marks, Transcript at 9390-9391.

To see the relevance of the minimum fee, imagine that, for some reason, I would like a sound recording performance license, but I actually do not intend to make more than a tiny number of performances. Now, since I am making a tiny number of performances, I should cover practically none of the overall costs of operating the licensing system; those costs are borne in proportion to the number of performances, and hence will be covered by the fees paid by others. But by virtue of my taking a license, the operator of the licensing system will bear certain costs that they would not bear if I had not signed up. They will have to add me to their accounting system; they may have to send me periodic invoices; they will have to receive, process and deposit my checks. And if I am making very few performances, the revenue that I generate under the per-performance model may not even cover these costs, let alone contribute to the overall system. Hence it is appropriate that every licensee pay at least enough to cover these incremental costs, regardless of how many performances they make.

RIAA itself has agreed to a license with a minimum fee of [[REDACTED]].[37] On its face, this calls into question the legitimacy of the proposed $5000 minimum fee. Conceptually, it is hard to see why RIAA would agree to a deal with a [[REDACTED]] minimum if the incremental cost of handling one more licensee were greater than [[REDACTED]].

[37] [[... REDACTED]]

Just as with the performance fee itself, ASCAP, BMI, and SESAC provide market evidence of what this kind of minimum fee looks like.[38] ASCAP's internet license annual minimum fee is $264; BMI's is $259; and SESAC's is $150.[39] Clearly, my proposed annual minimum fee of $250 is in the same range as these fees.

In calculating fees per performance, I totaled the fees paid to each organization, in order to compare total fees to total performances. With respect to the minimum fee issue, however, what is relevant is the minimum charged by any *one* organization, because *each* of these organizations has exactly the same kind of incremental costs associated with an additional licensee. Each of them must do the accounting, send the invoices, and process the checks. These costs are not related to the portion of the overall repertoire that the organization handles, because they are related to processing the licensee end of the operation, not the distribution end. In effect, this duplication of processing costs is a minor inefficiency associated with having multiple collecting organizations. Thus, using these fees as benchmarks, it is clear that a minimum on the order of $250 per year represents marketplace experience.

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[38] I have noted that it is difficult to use the musical work internet licenses to determine the appropriate fee per performance, because we have so little experience with stations operating under these licenses that we cannot measure the fees on a per-performance basis with any accuracy. This difficulty does not apply to the minimum fees, which can simply be read off of the license forms offered by each society.

[39] See Jaffe Rebuttal Exhibits 1A, 1B, and 1C.

D. Sensitivity of the fee model

Confirmation based on internet musical works fees. In my original report, I looked at the fee per listener hour of over-the-air radio stations rather than on the internet. The standard over-the-air radio license is based on a percent of revenue. Because it is desirable to have royalty payments based on performances, I converted the percent of revenue into a payment per performance.[40] As explained in my direct testimony, I believe that the over-the-air radio royalty is more reliable than a royalty rate that might be derived from the limited experience with musical works licensing on the internet.[41] In order to explore, however, whether there is any indication that rates would be much higher if one looked at musical works licensing on the internet, I have undertaken some analysis of the internet musical works licensing experience.

The standard-form internet license offered by BMI and ASCAP is a percent-of-revenue model. Although there are some alternative formulas, the primary formula amounts to 1.615% of revenue for ASCAP and 1.75% of revenue for BMI. The standard internet license offered by SESAC is based on page requests, not revenue. As noted previously, however, SESAC accounts for a small share of the overall royalty

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[40] [[ ]]*

[41] Direct Written Testimony of Adam Jaffe at 17-18.

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[40] See email from Steve Marks to Mark Cuban: "We both know that the value of music is not tied to revenues." (RIAA N1009, 7/23/99)

[41] Direct Written Testimony of Adam Jaffe at 17-18.

picture.[42] Hence the overall musical works royalty is approximately 3.5% of revenue. In over-the-air radio, the royalties paid to the three licensing organizations for musical works comprise approximately 3% of revenue. Because the definitions of revenue subject to fee are not precisely the same, these percentages may not be directly comparable.[43] It is clear, however, even with allowance for the inexact match in revenue definitions, that the internet royalty rates as a percentage of revenue are, at most, only slightly higher than the over-the-air radio rates and much lower than the 15% of revenue proposed by RIAA.

Since the internet is new, there is limited experience with licenses in this medium. However, one webcaster in this proceeding [[REDACTED]] has signed licenses with ASCAP, BMI, and SESAC. Because we have performance-related data, we can convert the fees to equivalent per-performance rates. [[

REDACTED

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[42] Most radio station groups have a license with SESAC that does not use the percent-of-revenue formula. Examination of the data provided to us suggests that ASCAP and BMI fees account for greater than 98% of fees paid by over-the-air radio stations.

[43] The ambiguity regarding the percent of revenue that goes to musical work performance rights in over-the-air radio derives from the fact that the licenses are specified in terms of a "net revenue" concept that is calculated solely for the purpose of the license agreements. The estimate of 3% to 3.5% is derived as follows. BMI apparently collects 1.35% of gross revenue. See Jaffe Rebuttal Exhibit 3, United States of America v. BMI, In the Matter of the Application of Music Choice, et al., for the Determination of Reasonable License Fees; Memorandum and Order, 64 Civ 3787 (LLS), July 20, 2001, at 6. Assuming that ASCAP's share is comparable, and SESAC has a small share, this would correspond to 3% of gross revenue. The stated net revenue percentages are 1.615% for BMI and 1.605% for ASCAP, suggesting that the total as a percent of net revenue would be about 3.5%.

REDACTED

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Simultaneous listeners. The issue was raised during my oral direct testimony that data on aggregate tuning hours measure computers using streams and not the number of listeners to those streams.[44] I am aware of no data indicating the frequency with which multiple listeners utilize a single internet stream. I do not have any reason to believe that the possibility of multiple listeners necessitates any meaningful adjustment to the fee model.

AQH. It was suggested during my cross examination that my listener-hour fee is not appropriate for the internet because it is derived from Arbitron AQH, which counts people who listen for 5 or more minutes during a 15-minute period as having listened for the entire 15 minutes.[45] As best as I can determine, Arbitron does not have data on the frequency with which people listen for more than 5 minutes but less than 15 minutes. As a threshold matter, in terms of aggregate listener hours, this effect would be offset by those listeners who listen to one or more stations during a 15 minute period, but do not listen to any one

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[44] Jaffe, Transcript at 6687.

[45] Jaffe, Transcript at 6687.

station for at least five minutes and therefore are not counted for having listened at all. Given this, and the fact that ratings based on AQH are the standard measure of listening audience throughout the radio industry, I do not think it is appropriate or necessary to make any adjustment for this issue. It certainly would not be appropriate to apply a three-fold adjustment based on the ratio of 15 minutes to 5 minutes. This would be right only if *every* listener stopped listening after 5 minutes (and no listeners ever tuned in for less than 5), which is clearly not correct.

E. Timing issues

We are not attempting to set fees for all time, just for specific two-year periods. The statute specifies that rates shall be adjusted every two years.[46] During that two-year time period, the contemporaneous musical work fee is a reasonable benchmark for the sound recording rate at that time. The fact that the formula underlying the musical works rate was first established in the past does not undermine its validity as an indicator of the market rate today. Markets must continually deal with the evolution of prices over time, and there is no reason to believe that current prices are distorted because of past prices.

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[46] Congress recognized that the "two-year intervals are based on upon...recognition that the types of transmission services in existence and the media in which they are delivered can change significantly in short periods of time." House Conference Report No. 105-796 at 86.

Thus, the fee paid for musical works in 2000 is clearly a valid benchmark for fees to be paid for sound recordings in 2000. As was pointed out in cross examination, in 2000, the fees that the over-the-air radio stations paid to BMI were for interim and not final fees.[47] The interim fees are set at the same level as the last final fees, which were subject to negotiations. There is an ongoing rate court proceeding to determine BMI final fees at which the radio stations have asked for a lower fee and BMI has asked for a higher fee. The final fees paid to BMI could be higher or lower than the current rate of 1.605% of revenue, so there is no reason to believe that there is a bias associated with using the interim fees.[48] Even if BMI fees were increased the full amount that BMI has requested [[REDACTED]] – which is surely higher than what the final rate will be – this would change our result by only a small amount.[49],[50]

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[47] Stephen Fisher, Transcript at 7700.

[48] In fact, in the BMI rate recently decided in a rate dispute between Music Choice and BMI, the final rate for the cable and satellite services was 1.75% of revenue, below the 3% of revenue interim fee. See United States of America v. BMI, In the Matter of the Application of Music Choice, et al., for the Determination of Reasonable License Fees; Memorandum and Order, 64 Civ 3787 (LLS), July 20, 2001.

[49] BMI payments account for approximately 49% of total performing rights organization fees. So if BMI's final fees were equal to its request, this would imply an upward adjustment of less than 6% to our fees.

[50] [[Letter from Michael E. Salzman of Hughes Hubbard & Reed, to Alan J. Weinschel of Weil, Gotshal & Manges, re: United States v. BMI; In the Matter of the Application of Hicks Broadcasting of Indiana, et al., May 22, 2000.]]

The 2000 fee is clearly conservative when applied to 1999, because revenues have been rising faster than have audiences.[51] Hence the 2000 fee provides a ceiling on the rate for the 1999-2000 time period.

With respect to 2001-2002, numbers on payments that are to be made in the future are simply not available. An appropriate approach would be to use the 2000 rate per performance as the crossover point for the sound recording, and then adjust that rate going forward (i.e., 2001-02) on the basis of forecasts of the CPI inflation index.[52] Mechanically, I propose an increase to the fee of 3% in 2001 and 3% in 2002.

F. Different fees for different types of streamers

The Panel requested evidence regarding fees for different types of streamers. Any such distinctions should be made on the basis of a conclusion that the competitive market value of the sound recording is different in these different contexts. The mere observation that differences exist, or that some uses appear to be more valuable to the users than others, does not demonstrate that the value of the sound recording itself is different in the different contexts. By analogy, a car with leather seats and power windows may be more desirable and sell for more than the same car with vinyl seats and window cranks. But that

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[51] Total radio industry market revenue grew 10% from 1999 to 2000 (Duncan's American Radio). Audience size remained approximately constant over the same time period. (Arbitron Radio Listening Trends).

[52] The Congressional Budget Office estimated an increase of 3% in 2001 and 2.7% in 2002. (Congressional Budget Office, August 2001, Table 2.2)

does not mean that the engine in the more expensive car is worth more than the engine in the second car.

It is clear that the value of an internet streaming services is derived from much more than just the sound recordings themselves. Indeed, if all one needed to derive value from internet streaming were sound recordings, it would be hard to understand why no one has managed to make any money in this business, since the sound recordings themselves have been available to anyone who filed for the statutory license. Thus the starting presumption should be that the various service offerings that are being considered differ with respect to the overall package of services that they offer users, but do not differ with respect to the value of the sound recordings themselves.

Consumer influence. Except to the extent that consumer influence affects the likelihood of displacement, it is not grounds, as a matter of economics, for a higher fee. People who have fancy stereos do not pay more for CDs; by the same token, the enhanced value associated with consumer influence is due to the technology of the webcaster. It does not increase the value of the underlying sound recording. Further, it is possible that consumer influence could increase promotional value; by allowing consumers to hear music more within a range of their

musical preferences, they may be more likely to hear new music that they like enough to buy.[53]

Further, defining what constitutes "consumer influence" creates a hornets' nest of problems. The ingenuity of entrepreneurs will always outstrip our ability to make distinctions and draw lines. And any lines that are drawn will end up being arbitrary. For these reasons, I do not think that it is necessary or appropriate to attempt to set different rates for streamers based on the extent of consumer influence.

The observation that fees distinguished on the basis of consumer influence are likely to be more trouble than they are worth is reinforced by the relatively small premia that have been negotiated in voluntary licenses involving the consumer-influenced services participating in this proceeding which the RIAA contends are "interactive." [[

REDACTED

]] It does not

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[53] Direct Written Testimony of Quincy McCoy at 5.

[54] [[REDACTED]]

[55] [[REDACTED]]*

make sense to create a potentially complicated set of arbitrary distinctions in order to implement such small differences, particularly in the absence of any evidence that significant displacement is occurring.

Syndicators. RIAA proposes a higher fee for syndicators. Within a per-performance model, there is simply no logical or economic justification for this higher rate. The performance is the performance, its value is what it is, and that value does not change if the fee is paid by a party who is packaging the performances for someone else's website. For example, one of the agreements proffered by RIAA itself as a benchmark for its proposal does not impose any premium for performances that occur in the context of syndication.[56]

Simulcast/rebroadcast of over-the-air signals. In the willing buyer/willing seller negotiation, the fact that the sound recording performance right is free over the air would likely have a significant impact when parties negotiated the rate for performance of the same sound recordings over the internet. Although there is not a one-to-one correspondence between performances that are heard by people who would otherwise listen over the air and performances within 150 miles, it does seem likely that Congress's decision to exempt rebroadcasts within 150 miles was driven by a related perception that the value of a sound recording rebroadcast on the internet cannot be totally divorced from the

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[56] [[REDACTED]]

zero value that the same sound recording performance earns over the air.[57]

Further, any concern about greater displacement of CD sales from internet performances vis-à-vis over-the-air performances does not seem to apply to simulcast/rebroadcast.[58] For these reasons, there is a strong case that the royalty rates should be lower for broadcast streamers than for webcasters.

I do not believe that it is possible to quantify these effects in a rigorous way so as to derive a discount off the webcaster rate that should be applied to the streaming of over-the-air broadcasting. In my direct testimony, I concluded that a sound recording performance royalty in the range of 40% to 70% of the musical works rate would be reasonable, given the greater value to sound recordings of promotion, the market power of the musical works owners, the conservatism of the calculations that I undertook, the evidence from other countries, and the statutory factors.[59] I then proposed a fee model based on the absolute upper limit of this range. This led to a proposed per-performance rate of $.00014, or 70% of the over-the-air rate of $.00020.

Given the factors discussed above, I believe it would be reasonable for the rebroadcaster rate, instead of being at the upper end of the 40%

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[57] Copyright Law of the United States of America, April 2000, Section 114(d)(1)(B)(i).

[58] Katz, Transcript at 1112-1113.

[59] Direct Written Testimony of Adam Jaffe at 48.

to 70% range, to fall at the lower end of the range. This would justify a rate of 40% of the over-the-air rate of $.00020, or $.00008 per performance. Although motivated in part by the same considerations underlying the exemption for listeners within 150 miles, this approach would not be based directly on any evidence regarding listenership within 150 miles, and no further discount based on any such information would be appropriate.

Figure 4 combines these figures with the fee-per-hour figures and shows a summary of the services' proposed fees.

G. Services' proposed royalty payments

The Panel requested, in its order of September 7, 2001, that each side provide a chart, based on evidence in the record, showing the royalty payments that each service would pay for October 28, 1998-December 2000 and for January 2001-December 2002. Figure 5 summarizes those calculations for services that have provided ATH data. ATH is a measure that is widely used on the internet and is, in effect, the average number of listeners times the number of hours streamed. For purposes of these calculations, I have used for the number of performances: 15 per hour for webcasters; 12 per hour for music-intensive broadcasters; and 1 per hour for news/talk/sports broadcasters.[60] When a licensee, instead,

[60] The evidence that I have reviewed suggests that 1 song per hour is likely to overstate *significantly* the use of music on news, sports, and talk stations. Many stations play little or no feature music. For example, WABC is one of the few ABC stations that has music programming. WABC reports to ASCAP and BMI that about 5% of its weighted *hours* contain music. Most of these hours must not be full hours of music,

calculates its fees, it will have the option to base its calculation on the industry average or on a reasonably reliable estimate, specific to that licensee, of songs per hour times tuning hours.

Webcasters. In this proceeding, the webcasting services have provided historic tuning hours for the October 28, 1998-December 2000 time period, and they have provided estimates of tuning hours for the period January 2001-December 2002. In general, a webcaster's fee is calculated by multiplying tuning hours times 15 performances per hour times the fee of $.00014 per performance, subject to a minimum fee for years that the licensee was in operation. For example, a service that has been in operation since October 28, 1998 (or before) would pay a fee in the first time period that is the greater of tuning hours times 15 times $.00014 per performance, or $542 ($42 for October 28-December 1998, $250 for 1999, and $250 for 2000). For the 2001-2002 time period, the fee per performance is adjusted by the projected increase in the CPI, which, as discussed above, is estimated to be 3% per year. For purposes of these calculations, I have assumed that the fee per performance is $.00015 ($.00014 times 1.06).[61] Again, the fee is calculated as the

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since WABC's only all-music programming is a three-hour Sinatra program on a weekend night.

[61] This is a simplifying assumption for convenience. I suggested above that the rate be increased 3% in 2001 and 2.7% more in 2002. The data provided to me by the webcasters are estimates for the two-year period 2001-2002. By applying the 6% increase to this total for both years, I slightly overestimate the payments that would result if separate numbers were available for the two years.

greater of the minimum fee ($250 per year for 2 years, or $500) or $.00015 per performance times 15 performances times ATH.

Webcasters that: (1) have significant non-music programming; (2) have programming that does not incur a sound recording copyright obligation (because the sound recordings are from before 1972 or because the service owns the copyright); or (3) have otherwise licensed a significant fraction of their music programming directly from the individual owners of the performance right are likely to estimate fewer than 15 performances per hour. The only webcaster to which I have made an adjustment for purposes of calculating the fees is Comedy Central Radio. According to Joe Lyons, 50% of the sound recordings used on Comedy Central Radio are owned by Comedy Central.[62] The tuning hours listed in Figure 5 have been adjusted to account for the fact that only 50% of the tuning hours are for sound recordings that are part of the RIAA repertoire.

Broadcasters. On a going-forward basis, the broadcasting stations that are simulcasting their programming on the internet will be able to track tuning hours either through server logs or through third party ratings services. However, the broadcasting services generally do not have historical data available covering the time period October 28, 1998-December 2000. I used data that I collected from the broadcasters

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[62] Direct Written Testimony of Joe Lyons at 4.

in the spring of 2001 about streaming activity at the beginning of 2001 to make a conservative estimate of the fees owed by these stations for the time period October 28, 1998-December 2000.[63] The fees displayed in Figure 5 are illustrative only. In some cases, the radio stations have contractual arrangements with the streaming provider to pay the licensing fees for sound recording performances.[64] For Clear Channel, the data that I have available is for 87 stations out of the 300 that were streaming at the time that the direct cases were filed.

To estimate fees, I assume that tuning hours in 2000 were equal to the level observed at the beginning of 2001. This is clearly a generous assumption since listening was growing over this time period. I assume that tuning hours in 1999 were half of the 2000 level.[65] For the two months in 1998, I assume that fees are at the same level as 1999 for the one-sixth of the year (e.g., two months).

For stations with music programming, the fee is the greater of $250 per year or $.00008 per performance times 12 performances per hour times tuning hours. Stations that are generally recognized to be sports/news/talk stations do not play significant music. For purposes of my fee calculations, I have assumed that the fee for sports/news/talk

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[63] The data is summarized in XJAF 00538a, 00539-00541.

[64] Halyburton, Transcript at 5311-5313.

[65] According to the survey done by Mazis, over 50% of respondents had listened to internet streaming within the last 12 months. See Direct Written Testimony of Michael Mazis at 7.

stations is 1 sound recording per hour at a rate of $.00008 per song times tuning hours, subject to the minimum fee.

V. PROMOTIONAL VALUE VERSUS DISPLACEMENT

As discussed in my direct testimony, the likely equivalence in value of the sound recording performance right and the musical work performance right holds before adjustment for any differences in promotional value.[66] For either right, expected promotional value would tend to induce the seller to reduce the royalty rate that would otherwise prevail. Under competition, the royalty rates would be reduced by the value of any promotion created by performances. This means that if the promotional value of sound recordings exceeds that of musical works, the competitive royalty for sound recordings would be lower than that for musical works.

There has been much discussion in the testimony in this proceeding about whether digital performances of sound recordings will promote the sale of CDs, or reduce the sales of CDs through "displacement." This is not an "either/or" proposition. Most likely, both will occur to varying extents for different listeners. What matters is the *net* incremental impact on CD sales due to digital performances; i.e., the increases (if any) due to promotion minus the decreases (if any) due to displacement.

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[66] Direct Written Testimony of Adam Jaffe at 36-37.

The fee model discussed above and in my direct testimony is derived from the overall equivalence of the sound recording and musical work market values, with an adjustment for the differential value of promotion to the sound recording and musical work in over-the-air radio. The validity of this model is not dependent on the assumption that no displacement occurs. It depends only on the assumption that the net promotional value due to internet broadcasts (the promotional effect minus losses due to displacement) is comparable to the estimated promotional value effect from over-the-air broadcasts. Furthermore, since the fee model is predicated on a 30% reduction from the over-the-air rate, while the conservative promotional value calculation I carried out would have supported a deduction of almost 50%, there is already some leeway for increased displacement, so long as that increase is not too large. [67]

This leads to the question of the state of evidence in this proceeding regarding the net effect of promotion and displacement from internet broadcasts. Much of this evidence consists of fears of what might happen in the future, rather than any testimony about displacement that is occurring today.[68] Given the time period-specific

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[67] The value to sound recording rights holders comes in the form of record company profits and recording artist royalties from the sale of CDs. I excluded artist royalties from my promotional value calculation in my direct testimony, which clearly leads me to understate the value of promotion to rights holders in sound recordings. (Direct Written Testimony of Adam Jaffe at 47; Jaffe, Transcript at 6528-6529)

[68] Katz, Transcript at 1034-1035, 1104-1105, 1120.

nature of the task before this Panel, it is simply unnecessary to try to determine how great displacement may be at some future date when internet streaming is better developed. This hypothetical future level of displacement, no matter how certain, is simply not relevant to fees for time periods ending in 2002.

Another form of evidence that has been presented is anecdotal impressions based on conversations with a few internet users.[69] No social scientist would base conclusions on evidence of this type, and it would be similarly inappropriate for the Panel to do so.

Putting aside anecdotal evidence and testimony about what might happen in the future, the facts in evidence regarding promotional and displacement effects are the following:

- Promotional value of over-the-air performances is large. This is confirmed by the SoundData survey data, as well as the millions of dollars spent every year by record labels to try to direct the promotional effect towards their own labels.[70]

- The survey conducted by Professor Mazis indicates that there is also observable promotional impact among existing listeners to internet streaming, and that this effect is larger than any displacement effect for these listeners.[71]

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[69] Katz, Transcript at 1097-1099, 1128; Griffin, Transcript at 1589-1591; Himelfarb, Transcript at 2886-2887.

[70] Direct Written Testimony of Michael Fine at 5-14; Rosen, Transcript at 532-533; McLaughlin, Transcript at 705-709; Altschul, Transcript at 937-952; Katz, Transcript at 1001; Griffin, Transcript at 1565-1566; Wilcox, Transcript at 1783-1785; Kenswil, Transcript at 2412. [[REDACTED]]*

[71] Direct Written Testimony of Michael Mazis at 18-20.

- There is no quantitative evidence that has been presented showing that significant displacement is occurring now, or is likely to occur through 2002.[72]

- There is no evidence that displacement was a significant concern cited by RIAA in its negotiations with its "benchmark" licensees as a factor justifying the rates it was requesting.

- Royalty rates for internet performance of musical works proffered by ASCAP and BMI do not appear to be significantly higher than the musical work performance royalties on over-the-air radio. Although the value of promotion to the musical works is less than to the sound recordings, it is still significant. If net promotion were known to be much less on the internet, the owners of rights in the musical works would be demanding higher rates.[73]

- There are attributes of streaming from which it is logical to infer that displacement *might* be larger on the internet than over-the-air.

- There are also attributes of streaming from which it is logical to infer that promotional value *might* be larger on the internet than over-the-air. These include:

  (1) the availability of track-identifying information;

  (2) the availability of other information about albums and performers in conjunction with the streamed music;

  (3) the presence in many cases of "buy buttons" or links to sites where purchases can be made[74];

  (4) [[REDACTED]]*[75]

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[72] Katz, Transcript at 1082; Griffin, Transcript at 1531; Wilcox, Transcript at 1800-1801; Pipitone, Transcript at 2301-2302. In fact, Wilcox stated that he does not believe there is a set formula that can be used to quantify the displacement caused by a given service. (Wilcox, Transcript at 1806).

[73] See Rebuttal Testimony of Adam Jaffe, Exhibit 2A (ASCAP) and Exhibit 2B (BMI).

[74] For example the NetRadio "buy button" produced $750,000 in record sales in 2000. Of course, listeners buy albums from other vendors in addition to ordering through "buy buttons." See discussion about NetRadio, Wise, Transcript at 4156-4158.

[75] Wilcox, Transcript at 1955-1959.

Taken together, this evidence simply does not support a conclusion that net promotion on the internet is likely to be less than on over-the-air radio, let alone enough less to require a rate even higher than that produced by the conservative discount that I have applied to existing over-the-air rates.

VI. THE RIAA BENCHMARKS

A. Framework for consideration of the RIAA benchmarks

RIAA has put forward as indicia of willing buyer/willing seller contracts the agreements that it entered into with various parties prior to this CARP proceeding. The Panel must determine whether these proffered benchmarks provide reliable information that indicates that the rates and terms requested by RIAA are consistent with the willing buyer/willing seller test, i.e., reflective of competitive market rates and terms for the statutory license. As a threshold matter, I have demonstrated that the RIAA proposed rates are 5 to 20 times the corresponding rate for musical works, whereas in the extensive, well-developed market for sound recording and musical work rights in movies and television the sound recording earns no more than the musical work. This is strong evidence that the RIAA benchmark agreements do not represent competitive market rates. Nonetheless, in this section I analyze the proffered benchmark agreements on their own terms.

In determining whether and to what extent to rely on these proffered benchmarks, there are three categories of issues to consider:

- Did buyers have good information about and access to a statutory license that was a good substitute for the RIAA-offered agreement, so that we can presume that they were "willing" buyers in the appropriate sense?
- How much real information about competitive market conditions does a given agreement convey, i.e., is it an economically significant transaction that should be given significant weight?
- Is the situation in which the agreement was reached such that it is comparable to the situation facing other statutory licensees?

If the first of these questions cannot be answered in the affirmative, then we cannot conclude that the contract at issue represents reasonable rates and terms, even in its own context. Buyers who did not have good information about their alternatives cannot be considered "willing" buyers in the sense of replicating competitive market outcomes. Buyers for whom the statutory license was not a good substitute for the voluntary deal being offered by RIAA did not have significant protection against the market power of RIAA, which was, of course, the only party offering the voluntary license. In other words, the statutory license is the conceptual "immunization" against the likelihood that the contracts negotiated by RIAA reflect its market power. If the statutory license was not a good substitute for the RIAA deal from the licensee's perspective, then this immunization was ineffective, and the

deal represents monopoly rates and terms rather than reasonable rates and terms.

Even if the license is not unreasonable as a benchmark for the above reasons, if it is not economically significant, it should be given little weight in determining overall market rates and terms. Any real market always contains aberrations. When there is little at stake economically, the buyer does not have a significant incentive to learn what true market conditions are. A buyer in such circumstances may well agree to terms that no rational buyer would accept if they were applied proportionately to a situation where the economic stakes were higher, simply because, in these circumstances, the unreasonable terms impose costs that are too small to make it worthwhile to search, negotiate, or litigate for more reasonable terms.

Finally, we still need to determine whether the buyers in these deals were similarly situated, from an economic and business perspective, to the licensees who are requesting the statutory rates and terms. Otherwise, the proffered agreements are not good "comparables." To use them in the current setting (if at all fair to do so) would require adjustment for the different economic and business circumstances that apply.

I will first discuss conceptually the kind of circumstances that appear to have arisen requiring negative answers to each of these three key questions, with examples from the documentary record as to where

they apply. I conclude this section with an overall assessment of the proffered benchmarks, and conclude that they do not support the fee proposal that RIAA has made.

B. Was the licensee a willing buyer in the appropriate sense?

RIAA puts forward these 26 agreements as evidence of what terms and conditions would be agreed to between willing buyers and willing sellers. As I have discussed before, I believe that the willing buyer/willing seller test should be interpreted as rates and terms that would prevail in a competitive market. As a general observation, it is worth noting that all of the 26 agreements contain confidentiality provisions that prohibit the licensees from discussing the agreements with others. If these agreements represent competitive rates and terms, there would be no economic logic to the inclusion of such confidentiality provisions. When my grocer sells me oranges, he has no reason or inclination to limit my ability to discuss that transaction with others. Indeed, open and freely-flowing information is one of the hallmarks of a competitive market. That RIAA chose to impose strict confidentiality on its licensees suggests that it did not, indeed, perceive the deals it was making as competitive market transactions, and/or it did not wish the market to function competitively via widely available information.[76]

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[76] It is, of course, not uncommon for contracts to contain confidentiality provisions. Often the reason for such provisions is that the contracts are highly tailored to the specific circumstances of the individual buyer, and the seller does not want other buyers to know about these tailored terms. But RIAA has not suggested that these contracts were based on special deals tailored to each licensee. To the contrary, they

Information problems. Reasonable information about the alternatives available is a necessary condition for a well-functioning market. Thus a willing buyer, in the sense of one who engages in a transaction that reflects what would transpire in a competitive market, must be reasonably well-informed about the available alternatives. With respect to transactions with RIAA, an important dimension of information is understanding how the statutory license works, and understanding how the availability of the statutory license makes it unnecessary for streamers to execute a voluntary deal with RIAA in order to engage in activities covered by the statutory license. If a licensee does not appear to have this understanding, then there can be no presumption that the availability of the statutory license disciplined the monopoly power of RIAA, and hence no reason to believe that the agreement reflects anything other than monopoly rates desired by RIAA.

There is considerable evidence that some licensees did not, in fact, understand the alternatives available to them.[77] Further, in some cases, it appears the licensees who seemed to believe that they needed a voluntary RIAA license to begin streaming were not disabused of that notion by RIAA. [[. REDACTED .]] was a potential licensee who

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have put forward these agreements as evidence of general market conditions, and as appropriate as benchmarks for the generic statutory license.

[77] I am aware that the RIAA website contained information about the availability of the statutory license. But the website information is fairly general, and it is clear from the evidence that some licensees did not understand what the statutory license did for them, even after consulting the website.

contacted RIAA evidencing significant misunderstanding of how the statutory license works. Their correspondence with RIAA started with an email reading:

[[

REDACTED

]]

It would seem that RIAA could have responded with the information that the filing of the intent letter was all that was necessary to be "totally compliant with the laws." Instead, Mr. Marks responded:

[[

REDACTED

]] (RIAA N1750-N1751, emphasis added)

This examples is only illustrative of incorrect and incomplete information that was held by numerous licensees.[78]

Concerns about timing and uncertainty. As noted, without the statutory license available as a reasonable substitute, the rates and terms in the RIAA deals must be construed as monopoly rates and terms, not reasonable rates and terms. To the extent that the delay and uncertainty associated with the ultimate outcome of this proceeding was a significant problem for a potential licensee, the reliance on the

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[78] See, for example, [[

REDACTED

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statutory license and the outcome of this proceeding would not have been a good substitute, meaning that the licensee may well have agreed to an above-competitive rate for the (available) voluntary deal.

Examples of impatience and concerns about the uncertain CARP outcome fall into several broad categories, and are evidenced in the record. Several licensees demonstrated a sense of urgency because of a variety of other business matters that were affected by the RIAA negotiations, including the need on the licensee's part to secure an RIAA license as a predicate to concluding a webcast radio syndication agreement with a third party or, in some cases, to secure investors.[79] For example:

[[

REDACTED

]]

[[

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[79] For other examples of timing concerns, see, for example, [[

REDACTED

]]

REDACTED

]][*81] Again, these examples illustrate the ways in which delay and uncertainty made reliance on the CARP a poor substitute for the deal being offered by RIAA.

"Bundling" of other considerations with rights conveyed by the statutory license. It is elementary logic that the rates in the deals made by RIAA are indicative of reasonable rates for the statutory right *only* if what was conveyed to the licensees by RIAA in those deals was limited to the statutory right. There is considerable evidence that this was not the case. On the contrary, many of the licensees made it clear that a significant reason they were doing deals with RIAA was to get

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[80] On the uncertainty of arbitration, see, for example, [[REDACTED]]

[81] On the uncertainty of coverage issue, see [[

REDACTED

]]

something *other* than the simple right to make streaming performances.[82]

For example, as Mr. Marks discussed in his oral testimony, [[

REDACTED

]]

[[

REDACTED

]]*

[[

REDACTED

]]

[[

REDACTED

]]*

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[82] For examples of additional other considerations, see, for example, [[REDACTED]]

[83] [[REDACTED]]

[[REDACTED

]]

[[

REDACTED

]]*

[[

REDACTED

]]

[[

REDACTED

]]*

The record reflects several other instances, as well, where licensees were interested in securing benefits broader than those provided by the statutory license itself.[85] For example, during the course of their statutory negotiations, [[REDACTED]] were able to resolve other disputes with RIAA. [[

REDACTED

[[- REDACTED

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[84] See also, for example, [[

REDACTED

]]

[85] In a similar vein, RIAA has included agreements between individual record labels and background music services (see, e.g., RIAA Exhibit No. 026 DR and 027 DR). To the extent that such agreements afford the licensees rights in addition to the rights available under the statutory license (e.g., right to manufacture master copies, use names and likenesses of artists) in Section 112(e), these agreements have the same problems noted with respect to the webcaster agreement – they do not reflect what a willing buyer would pay a willing seller for the statutory right to make an ephemeral copy in aid of an exempt performance.

[86] [[

REDACTED]]

REDACTED

]]*

Cost of litigation. The value of a CARP-determined statutory license as a substitute for a voluntary deal is inherently limited by the legal costs that parties expect would accompany that option. Put simply, the cost of relying on the statutory license would be the expected reasonable rate *plus* litigation costs. Thus, if the RIAA-proposed voluntary deal exceeded a reasonable rate, but exceeded it by less than the expected litigation costs, licensees would still agree to the proposed unreasonable rate.

Many licensees knew that their streaming activities might be limited during the arbitration period, and it was often true that even rates significantly above a reasonable level would still be cheaper than litigating in this proceeding. Examples of such concerns in the record are as follows:

[[

REDACTED

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[87] See, for example, [[

REDACTED

]]

[88] See, for example, [[

]*

REDACTED

REDACTED

]]

[[REDACTED

]]

Mr. Marks of RIAA actually utilized such anticipated litigation costs in negotiation [[ ]]
[[REDACTED

REDACTED

]]

This message implies that, even if [REDACTED] believed that the reasonable rate was zero, they would still be better off accepting RIAA's "proposed numbers," because litigating to get the reasonable rate would cost even more.

C. Adjustment of the RIAA benchmark to derive a reasonable royalty

As I discussed in my direct testimony, it is very difficult to start from an unreasonable benchmark, and then adjust it to produce a reasonable rate, because the magnitude of "unreasonableness" will typically be unknown. [[

REDACTED

]] When an agreement is reached, and the

alternative to that agreement is a reasonable fee procured through large legal expenses, the only economically reasonable inference is that the agreed rate is no higher than the reasonable rate *plus* the expected legal fees. This implies that one could adjust the agreed-to rate by subtracting the expected legal fees to yield the reasonable rate. But if Mr. Marks is correct that the legal fees would exceed the payments under the agreement, such an adjustment would produce zero as the reasonable rate. More generally, it is not going to be possible to make such adjustments in a logically consistent manner.

D. Economic significance or "weight"

In the previous section, I discussed numerous reasons why many of the license deals put forward by RIAA as benchmarks cannot be presumed to represent reasonable royalty rates. In addition, most of the agreements are with streamers who have never streamed, have already ceased streaming, or are operating at levels such that the payments they are making to RIAA are economically insignificant (often at the minimum fee rate rather than any per-performance or revenue-based formula). Such agreements do not convey significant information about market conditions even if they could be presumed to be reasonable.

[[

REDACTED

REDACTED

]]* the amount represented by the sound recording rights in my music and television data (which demonstrated equality with musical work valuations), and about one-seventieth as large as the over-the-air royalties that were used in my promotional value calculation and that establish my per-performance rate.

Half of the agreements are with parties who have either ceased operations [[REDACTED]] or have not yet launched streaming [[REDACTED [1]]] For most of the licensees, RIAA has either not reported amounts paid under the licenses, or reported very small amounts, as low as [[REDACTED]]

Thus, in the aggregate, there is much, much less here than meets the eye. Contrary to the impression created by the oft-repeated reference

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89 [[REDACTED]] Direct Written Testimony of Steven M. Marks

90 Direct Written Testimony of Steven M. Marks; [[REDACTED]]

91 Direct Written Testimony of Steven M. Marks; [[ ]]

92 Also, see [[REDACTED]]

to 26 benchmark agreements, RIAA has not presented the Panel with broad evidence regarding marketplace transactions. On the contrary, the vast majority of the proffered benchmarks convey little or no information about market conditions. Even RIAA's own expert Dr. Nagle agreed that rates for webcasting should be based on economically significant webcasters (and should not be based, for example, on agreements with companies that have proven not to be viable). Of the 26 statutory licensees, Dr. Nagle believes that only [REDACTED]* is economically significant.[93]

[[

REDACTED

]]

[93] Nagle, Transcript at 2562-2563, 2642-2643, 2648. [[

REDACTED

]]

[[

REDACTED

]] Thus while RIAA *claims* that its fee proposal is supported by the benchmarks it has put forward, if weighted by economic significance, these purported benchmarks present little support for the percent-of-revenue/expense formula, and support a per-performance fee only [[REDACTED]]* of the fee they propose.

E. Comparability

Finally, many of the purported RIAA benchmarks are not appropriate for this proceeding because the licensees and the economic and business circumstances in which they operate are different from the licensees seeking the statutory license in this proceeding. At the most basic level, many of the licensees are not primarily in the business of

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[94] [[

REDACTED

]]*

[95] [[

REDACTED

]]

streaming; they sought the streaming license as a means to the end of other, non-statutory licenses, or they paid little attention to the terms of the streaming license because it was unimportant to their business.[96]

[[

REDACTED

]]

[[

REDACTED

]]*

As discussed above, many licensees were primarily interested in interactive licenses or other deals that they thought would be facilitated by having an RIAA agreement. [[

REDACTED

]]* The only entity among the 26 purported benchmark licensees whose sole business is internet streaming, and is currently operating, is

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[96] See, for example, [[

REDACTED

]]

[97] See [[

REDACTED]]

[98] See [[

]] REDACTED

[[REDACTED]] with a single channel of streaming audio; and [[REDACTED]] appears to have made only trivial royalty payments under its agreements. Thus, even putting aside issues of reasonableness and significance, RIAA simply has not put forward a benchmark that is comparable to the licensees before the Panel.

F. Overall assessment

Considering the information about RIAA's proffered agreements as a whole, I find that RIAA has failed totally to provide benchmarks that justify its fee proposal as consistent with the willing buyer/willing seller standard. In many cases – and in all cases where economically significant royalties have actually been paid – there are significant indications that the transaction does not represent competitive market conditions, because the licensee did not have good information, could not wait for the alternative of the CARP, was primarily interested in getting things other than the statutory rights, or viewed the legal cost of getting the reasonable statutory rate as too high to be worthwhile. Thus while these transactions were "voluntary" in some sense, they do not meet the willing buyer/willing seller standard of the statute.

Even putting aside, however, the evidence that the transactions do not represent reasonable fees, the experience under these agreements simply does not provide justification for the fee proposal that RIAA has actually put forward in this proceeding. That proposal has three

components that interact in a complex way. The three components are: 15% of revenue, 5% of operating expense, and $.004 per performance. I consider in turn whether there is economically meaningful support for each of these elements that actually appears in the RIAA benchmarks.

There is no economically significant support in these agreements for royalties based on 15% of revenue, or indeed for *any* royalty based on revenue. No licensee has paid non-trivial royalties derived as a percentage of revenue. Given the nascent stage of the industry and the status of these licensees, there is no evidence that any of the voluntary licensees ever expected to pay royalties based on revenue. The appearance of the words "15% of revenue" in the contracts is of no economic significance if the parties knew that royalties would not be paid under this formula (because of an alternative minimum fee, for example). The proffered agreements do not provide any evidence that any of the voluntary licensees actually believed that a royalty equal to 15% of revenue is a reasonable royalty. Thus the revenue-based royalty component of the RIAA proposal stands without any evidence that buyers were ever willing to pay it.

It appears that there may be one licensee who paid a non-trivial royalty on the basis of 5% of expenses [[REDACTED]]. But RIAA itself puts forward the expense-based royalty only as a backup to the revenue royalty to ensure that the royalties will be reasonable even if the licensee has little or no revenue. That objective is achieved automatically

by a reasonable performance-based fee. Thus if the fee model contains a reasonable performance-based fee, the royalty based on expenses serves no economic function.

Non-trivial royalties have been paid on a per-performance basis. As noted above, however, the royalties that have been paid do *not* support the per-performance fee that RIAA has actually proposed. The overwhelming bulk of the royalties actually paid on a per-performance basis were paid on the basis of [[REDACTED]] per performance, not $.004.

[[

REDACTED

]]

Finally, non-trivial royalties have apparently been paid on essentially a lump-sum basis [[REDACTED]] But, again, there is no connection between these royalty amounts and the RIAA proposal in this proceeding. There is no basis for an inference that the payment of these amounts somehow demonstrates the reasonableness of 15% of revenue or $.004 per song, since the payments were not made on those bases.

I began this section with the suggestion that the fact that the RIAA's proposed rate is inconsistent with competitive market evidence creates a strong presumption that the agreements it has proffered are the result of market power rather than competition. Analysis of the

circumstances surrounding the agreements provides ample support for that proposition.

There is certainly an intuitive attraction to using market transactions for the right in question as a benchmark for the statutory rates and terms. But even putting aside the evidence of market power, it is striking the extent to which the rates and terms proposed by RIAA for statutory licensees are not, in fact, the rates and terms supported by its own benchmark. The RIAA proposal bears cosmetic similarity to some of the agreements that have been reached. But the core elements of that proposal are not, in fact, supported by the economic activity that has occurred in connection with those agreements.

VII. IRRELEVANCE OF THE TESTIMONY OF DR. NAGLE TO WILLING BUYER/WILLING SELLER VALUATION

Dr. Nagle presents an analysis in which he purports to estimate the maximum amount that a "viable" webcaster would be willing to pay for the right of public performance of sound recordings on the internet. As explained below, he makes serious errors in these calculations. But even putting these errors aside, the exercise of estimating the buyers' maximum willingness to pay for the right has only limited relevance to the willing buyer/willing seller value. By definition, the *maximum* willingness to pay of the buyer would be extracted only by a *monopolist* seller. That is, in real market transactions, the only way, conceptually,

that a licensor could achieve a royalty at the level calculated by Dr. Nagle would be if that licensor had a monopoly on the right in question.

For the reasons explained in my direct testimony, and as supported by the one of RIAA's experts, the economically appropriate interpretation of the willing buyer/willing seller test is that it corresponds to a *competitive* market rate, not the rate that would be extracted by a monopolist.[99] The monopolist rate will always be higher than the competitive rate. Further, the monopoly rate will be much higher than the competitive rate if the demand for the good in question is highly "inelastic." Because most streamers have no alternative to securing a blanket license for the sound recording performing right, their demand is highly inelastic, and the monopoly rate is likely to be far in excess of the competitive rate.[100]

The maximum willingness to pay of the buyer does have some relevance to the competitive, willing buyer/willing seller rate: it is the starting point or "upper bound" rate with which the buyer would enter the negotiations. This bears on the willing buyer/willing seller test *only* insofar as it establishes, in principle, the reservation or walk-away rate for the licensees. We know only that the willing buyer/willing seller rate could never exceed this level. As discussed above, a similar analysis can

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[99] Wildman, Transcript at 3474-3475.

[100] Dr. Nagle notes that a premise of his model is that webcasters do not have an economically viable alternative to an RIAA license. Nagle, Transcript at 2608.

uncertain venture must be as great as the market return on capital.[103] If everyone understands that 80% of the people who play this game will lose – and hence earn zero or, more likely, negative returns – the returns for those who succeed have to be very high in order for the average or expected return to be acceptable to investors. If the reality were "there is an 80% chance you will lose your shirt, and a 20% chance you will earn the same return that is earned in a typical (much less risky) business," no one would enter.

Dr. Nagle's analysis is based on the maximum amount a "viable" webcaster would be willing to pay. It is difficult, however, to understand how the model presents information that is relevant to the Panel's task of determining reasonable fees for particular time periods. Dr. Nagle determines the RIAA fee based on the profitability of a viable webcaster; the profitability is determined, in turn, by the number of unique listeners. But Dr. Nagle does not know the number of unique listeners that any webcaster has or will be able to attract. The figure he uses for number of unique listeners is the result of "backing into" the number of listeners needed for profitability, rather than determining whether a

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[103] Under some circumstances, the expected return on risky investments would have to *exceed* the expected return on less risky investments, in order to compensate investors for bearing risk. This risk premium would apply if the investors were risk-averse and unable to eliminate the consequences of risk through diversification. In criticizing Dr. Nagle's analysis, I am *not* assuming such a risk premium, which would further increase the required return, and hence decrease the rate Dr. Nagle's hypothetical webcaster would be willing to pay for performance rights.

webcaster would be able to attract that number and hence actually be profitable.[104]

Many of the assumptions that Dr. Nagle used to construct a profitable webcaster are quite inconsistent with current market conditions. As an example, Dr. Nagle assumes that the theoretical viable webcaster will sell audio ads at $30 CPM, selling about 60% of its inventory. Current industry conditions are quite different.[105]

VIII. SIGNIFICANCE OF BROADCASTER/WEBCASTER PROJECTIONS

The financial and business plan projections made by the broadcasters and webcasters do not have any direct relevance to determining the willing buyer/willing seller valuation of the sound recording internet performance right. First, to the extent that they bear on valuation at all, they would be relevant only to the maximum willingness to pay, which cannot be related to the competitive-market, willing buyer/willing seller valuation unless one can determine what share of this maximal valuation the competitive market would convey to the holders of rights in the sound recording. In any event, whatever this share of value is, there is no reason why it should differ between the

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[104] Nagle, Transcript at 2570. Nagle testified that, all else equal, his model will yield lower royalties, the lower the number of unique listeners. Nagle, Transcript at 2734.

[105] For example, Michael Wise of NetRadio testified that audio ads were in the range of [[REDACTED]]. Wise, Transcript at 4208-4209. Other webcasters testified that audio ads were in the range of $4 to $20. Moore, Transcript at 7520; Jeffrey, Transcript at 8201; Porteus, Transcript at 4597.

sound recording and the musical work. Since we have direct evidence of the willing buyer/willing seller valuation of the musical work, this provides a much more direct route to the willing buyer/willing seller valuation of the sound recording.

Second, even as to this maximal value, these projections can inform us about what that value might be in the future, but they cannot inform us as to what the value is during the 1998-2002 period. In a competitive market, these future valuations would affect royalties today only if the royalty agreements were for long durations. But the statutory framework explicitly adopted relatively short valuation periods precisely so the Panel could avoid having to gaze into the future. A competitive market valuation for rights being conveyed for a short duration would relate only to valuations of those rights during the period of the rights transfer.

Finally, even as to future market conditions, the projections that were produced do not tell any consistent story. The projections are very difficult to compare one to another, and they have been subject to drastic revision even over very short time periods.[106] Hence, it is not possible,

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[106] For example, [[

REDACTED

be done for the seller, and the zero incremental cost tells us that the lower bound for the rate is zero. Dr. Nagle's analysis is totally unhelpful in determining where, in the range between these two points, a willing buyer and a (competitive) willing seller would end up.

Although Dr. Nagle's analysis does not tell us where in the range between the seller's walk-away point (zero) and the buyer's walk-away point (the maximal value calculated by Dr. Nagle) the two parties would come to agreement, his analysis is useful for illustrating that the costs of the seller do not enter in any way into this analysis. It is only the buyer's valuation, and the give-and-take of negotiation, that determine the share of that value passed to the seller, which affects the outcome. This is why the willing buyer/willing seller valuation for the sound recording ought to be similar to that of the musical work: they are both nothing more than some negotiated fraction of the value to the buyer of making public performances.[101]

Even on its own terms, Dr. Nagle's analysis is conceptually flawed. In particular, while Dr. Nagle states that many – if not most – streamers will fail, he does not consider this highly risky environment when selecting the rate of return that the successful streamers will expect to earn.[102] Economics tells us that the *expected* or average return for an

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[101] As discussed above and in my direct testimony, this approximate equality holds only before adjustment for promotion and displacement. After adjustment, the sound recording performance right is worth less than the musical work right because of greater promotional value for the sound recording.

[102] Nagle, Transcript at 2706, 2765-2766.

on the basis of these projections, to say anything about what the "typical" webcaster will look like at some point in the future, let alone before the end of 2002.

One conclusion that does emerge from the projections that were produced is that expectations about the ultimate profitability of the streaming business were generally revised downward over the time period from the fall of 2000 to the spring of 2001. (For example, [[

REDACTED

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In my view, expectations about ultimate profitability are not relevant to the willing buyer/willing seller rate for a short time period, because the competitive market rate for such a period would be based on current conditions, not future projections. The dramatic revisions of these forecasts that occurred over time periods of just a few months illustrate a further difficulty with using forecasts of future conditions for royalty determination – they are inherently volatile and hence unreliable as a royalty basis.

If the Panel does conclude, however, that the royalty should be tied somehow to such expectations, these forecasts do have one strong

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REDACTED

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[107] SERV 00285-SERV 00352, SERV 00167-SERV 00209, SERV 00453-SERV 00504, SERV 00687-SERV 752.

implication. Any royalty based in some way on expectations of future profitability would have to be much lower for the 2000-2001 period than for the 1998-1999 period, since such expectations were clearly much lower in the later period.

IX. CONSEQUENCES OF THE RIAA FEE PROPOSAL

The RIAA fee proposal is a complex one. At first blush, it appears to offer important flexibility by allowing the licensee to choose between a fee based on the number of performances ($.004 per performance) or a fee based on the licensee's revenues (15%) and expenses (5%). But this apparent flexibility is illusory, limited by (1) the intrinsically much greater rate embedded in the performance fee, and (2) the fact that the alternative to this high rate is itself the *greater* of two fees, one based on revenue, and one based on expenses.

The fact that the per-performance fee is intrinsically much greater than the percent-of-revenue fee can be seen by comparison of the RIAA proposed rate to the musical work rate. In over-the-air radio, musical work performance royalties make up approximately 3% to 3.5% of revenue, so the RIAA proposal of 15% is between 4 and 5 times as great as the musical work rate. As described in my direct testimony, I have computed that the percent-of-revenue formula for over-the air radio on a per-performance basis is about $.00020 per performance.[108] Thus on a

[108] See Figure 3.

per-performance basis, the RIAA rate of $.004 per performance is approximately 20 times the musical work rate, and at least 4 times greater than RIAA's own percent-of-revenue proposal.[109]

Turning to the revenue/expense alternative, licensees who want to avoid the high per-performance fee must pay the *greater* of 15% of revenue or 5% of expenses. Certainly, any licensee who achieves a viable business position will have to have revenues that exceed its expenses, so it is clear that for any viable business the revenue/cost alternative is really just a 15% of revenue alternative.

Because the per-performance alternative is much greater than the percent-of-revenue alternative, the only kind of licensee who might prefer the per-performance model would be one who is somehow spending a lot of money or earning a lot of revenue, but not actually making very many performances. In such a circumstance, it is very likely that the revenue has relatively little to do with the performances themselves, and RIAA's collecting this exceedingly high rate would essentially amount to its taxing other sources of value besides the performances.[110]

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[109] A similar relationship exists in comparison to musical work performance rates on the internet. The combined royalty rates of ASCAP and BMI on the internet are 3.5% of revenue. (See Section IV above) [[REDACTED]] So in this case the RIAA revenue proposal is + times the musical work rate, while its per-performance proposal is 100 times the musical work rate.

[110] [[REDACTED]]

To date, the majority of licensees have expenses that significantly exceed their revenue. In such circumstances, RIAA does not permit them to pay on the basis of percent-of-revenue. Rather, they must pay 5% of expenses, if that results in a royalty greater than 15% of revenue. RIAA justifies this "greater of" requirement by the argument that they should be entitled to minimum compensation for the use of the performance right even if the licensee has not achieved significant revenue.[111] Of course, an alternative and much more direct way to make sure that RIAA gets a royalty even if revenue is low would be to have a reasonable fee on a per-performance basis. Such a fee would accomplish exactly the objective RIAA claims to seek: to get compensation that reflects the use of sound recordings. But a reasonable per-performance fee is not part of the RIAA proposal, as evidenced by the fact that its per-performance alternative is attractive for very few licensees.

One red herring that has been raised by RIAA is the magnitude of payments for sound recordings compared to payments for other inputs, such as bandwidth.[112] RIAA seems to take it as an article of faith that the sound recording rights are the major, or a major, source of value in streaming. But this is entirely an empirical question. There is no *a priori* basis for concluding that a large part of the value of streaming is associated with the sound recording performance rights.

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[111] Direct Written Testimony of Steven M. Marks at 17-18.

[112] Opening Statement, Transcript at 89-92.

As a threshold matter, other inputs do not generate promotional value. Hence even if it were true that the sound recordings were the key to value, the royalties paid might still be less than the amounts paid for other inputs.

More fundamentally, while it is understandable that RIAA wants to believe that the sound recording performance right is the key to the cage of the golden goose, the evidence overwhelmingly suggests the contrary, that is, the key source or sources of value in internet streaming lie elsewhere. After all, sound recording performance rights have been available to anyone who cares to use them, if they state their intent to pay under the statutory license, and no one has figured out how to create value from streaming sufficient to cover the costs of doing so. This leads to one of two conclusions. Either there is no way to make money in this business, in which case the sound recording performance right is clearly not very valuable, or else it must be the case that the key or keys to making money are things *other* than sound recording performance rights. Hence the mere observation that a fee model produces a sound recording royalty that is a small fraction of overall costs, or lower than some other specific cost elements, utterly fails to answer the key question of what the sound recording performance right is really worth.

Finally, RIAA does not offer a rate on an aggregate tuning hour (ATH) basis. While reliably estimating the number of songs played would greatly increase transactions costs for many if not most licensees, given

that ATH is, for many licensees, an already available indicator of listenership, it is important that an alternative based on ATH be available. This is not an issue of the level of fees, but only of making the blanket license as efficient as possible as a mechanism for securing the necessary rights. For any per-performance fee that is determined to be reasonable, an equivalent listener-hour (ATH) fee can be calculated by multiplying the per-performance fee by average or typical performances per hour.

X. EPHEMERAL ISSUES

In my direct testimony, I noted that from an economic perspective, there is no function served by charging a distinct royalty for the making of ephemeral copies, the economic purpose of which is limited to facilitating performances. In such a context, the value received by the licensee is derived from the performance. One can, if one wishes, split this performance-derived value into two pieces, and assign one piece to the performance itself, and a second piece to the right to make copies that facilitate the performance. But the sum of these two pieces should equal the reasonable royalty for the right to make performances.[113]

Since the direct testimony phase, the Copyright Office has issued a report, in connection with its reporting obligations under the Digital

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[113] RIAA witness Nagle puts forth the identical economic interpretation. See Nagle, Transcript at 2632.

Millennium Copyright Act (DMCA), that confirms both this conclusion and the reasoning that I utilized in reaching the conclusion:

> "...section 112(e) can best be viewed as an aberration...Nor did we see any justification for the imposition of a royalty obligation under a statutory license to make copies that have no independent economic value and are made solely to enable another use that is permitted under a separate compulsory license."[114]

Note that I am *not* arguing that there is never independent value in different uses of a given piece of intellectual property. For example, in the case of jukeboxes, a Copyright Royalty Tribunal reasoned, correctly, that the fact that a mechanical royalty is paid to musical work rights holders when their songs are reproduced on CDs does not obviate the need for payment of a reasonable royalty when such a CD is performed publicly on a jukebox.[115] What distinguishes that situation from the current one is that, unlike ephemeral copies, the CD copy has a clear economic value that is independent of its use in making public performances in a jukebox. Further, the use of the CD to make public performances clearly creates value that is not associated with most CDs, and which could not reasonably be expected to be captured in the mechanical royalty paid when the CD is created. What makes the ephemeral copies somewhat unusual, and leads to the conclusion that there can be no economically sensible royalty for ephemeral copies that

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[114] See Jaffe Rebuttal Exhibit 6, DMCA Section 104 Report, U.S. Copyright Office, August 2001, at 144, fn. 434.

[115] See Jaffe Rebuttal Exhibit 7, Final Rule of the Copyright Royalty Tribunal, 46 Fed. Reg. 884, 889, Docket No. CRT 80-1 (January 5, 1981).

is in addition to the reasonable royalty for performances, is the fact that the ephemeral copy serves no economic function other than facilitating performances.

The conclusion that there is no independent value that can be attached to ephemeral copies does not depend on the number of such copies being technologically determined, with no flexibility available to streamers with respect to the number of such copies made. It is my understanding, based on the testimony of Professor Zittrain, that a major reason that multiple ephemeral copies are made is to allow streaming of music in different formats to accommodate potential users with different software or at different rates to accommodate potential users with different modem speeds.[116] Clearly, by making the stream available in different formats or at different speeds needed by different users, these copies increase the number of performances that occur. The economic consequence of fewer such copies would be fewer performances. So again, the creation of these copies serves to create value by increasing the number of performances. The appropriate measure of this value is the reasonable performance royalty, and under my proposed performance-based model, increased royalties would be paid as a result of the increased performances.

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[116] Zittrain, Transcript at 6037-6045.

The making of ephemeral copies by the services frequently results in other benefits to copyright owners. For instance, Douglas Talley testified to the security benefits enabled by the use of buffer and cache copies in encrypting/decrypting and encoding/decoding data. The sound recording owners likewise benefit from the increased sound quality enabled by the use of ephemeral copies.[117]

Finally, I note that minimum fees are mentioned by the statute in both Section 112 and 114. As discussed above, however, the economic justification for a minimum fee is to ensure that the incremental costs of servicing a licensee are covered by that licensee's royalty payments. I see no reason why the cost of servicing a licensee with both section 112 and 114 licenses would differ from servicing a licensee with only a 114 license. Hence there is no economic justification for distinct minimum fees for the two rights being licensed.

[117] Talley, Transcript at 8649.

I hereby declare under penalty of perjury under the laws of the United States that the foregoing testimony is true and correct to the best of my knowledge, information and belief.

Adam B. Jaffe

Executed this 3rd day of October, 2001.

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Figure 3
SUMMARY OF OVER-THE-AIR BROADCASTER FEES

	Recalculated	Testimony of Adam Jaffe at Exhibit B-2
Fee per Performance (Listener Song)	$0.00020	$0.00020
Fee per Listener Hour	$0.0022	$0.0022
Performance (Listener Song) Model		
Number of Stations	872	858
Total ASCAP/BMI/SESAC Fees FY00 (millions)	$143	$141
Total Performances (Listener Songs in billions)	730	715
Listener Hour Model		
Number of Stations	926	898
Total ASCAP/BMI/SESAC Fees FY00 (millions)	$148	$143
Total Listener Hours (billions)	67.2	65.3

Sources:
ASCAP/BMI/SESAC annual report fee data for sample of radio stations
Listener Hours: Calculation from Arbitron Spring 2000 and Fall 2000 data
Songs per Hour: BDS Average Detects per Hour per Radio Station for 2000 (recalculated)

Figure 4

SUMMARY OF SERVICES' PROPOSED FEES

	Fee Per Performance	Fee Per Tuning Hour
Webcasters	$0.00014	$0.0021
Broadcaster Streamers/ Rebroadcasters	$0.00008	$0.0010

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